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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/671,742	09/29/2000	Takashi Saito	001215	2058

7590 09/30/2002
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EXAMINER	
ZIMMERMAN, GLENN	
ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 09/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/671,742	SAITO ET AL.	
	Examiner	Art Unit	
	Glenn Zimmerman	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-6 in Paper No. 5 is acknowledged.

Drawings

Figures 5-7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Seats et al. U.S. Patent 5,663,661.

Regarding claims 1,2,4 and 5, Seats et al. disclose a plasma display device (title) comprising a display module (Fig. 1 and 2), the display module having electronics

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(drive unit ref. 30) mounted to the back surface thereof and utilizing the front surface thereof as a display surface, the display module further comprising:

A back surface glass plate (lower glass plate ref. 11) having discharge electrodes (molybdenum lower electrodes ref. 21);

A front surface glass plate (upper glass plate ref. 10) that is mounted on and opposing to the back surface glass plate via separation walls (parallel walls ref. 13) and having discharge electrodes (upper electrodes ref. 20); and

Luminescent pixels (cells Fig. 1 ref. 2) defined by the back surface glass plate, the separation walls and the front surface glass plate;

Wherein the luminescent pixels are formed so that at least the surface of the back surface glass plate opposite the display surface is a reflection surface (molybdenum lower electrodes ref. 21 or also reflective layer ref. 19).

Claim 4 is a product-by-process claim and the particular process "formed by metal plating" has not been given patentable weight.

Claim 5 is a product-by-process claim and the particular process "formed by adhering metal leafs" has not been given patentable weight.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seats et al. U.S. Patent 5,663,611 in view of Murai et al. U.S. Patent 5,754,003.

Regarding claim 3, Seats et al. teach all the limitations of claim 3, but fail to teach that the surface of the front surface glass plate is not a reflection surface. Murai et al. in the analogous art teach that the surface of the front surface glass plate is not a reflection surface (**col. 3 lines 27-55**). Additionally, Murai et al. teach incorporation of such a non-reflection surface to improve transparency (**col. 3 lines 27-55**).

Consequently it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a non-reflecting surface in plasma display panel of Murai et al. since such a modification would improve transparency as taught by Murai et al.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seats et al. U.S. Patent 5,663,611 in view of Schoenbach et al. U.S. Patent 5,561,348.

Regarding claim 6, Seats et al. teach all the limitations of claim 6, but fail to teach wherein the reflection surface opposite the display surface has a concave surface, and the light reflected from the reflection surface is condensed at the display surface.

Schoenbach et al. in the analogous art teach wherein the reflection surface opposite the display surface has a concave surface, and the light reflected from the reflection surface is condensed at the display surface (**col. 9 lines 15-26; Fig. 8**). Additionally,

Schoenbach et al. teach incorporation of such a concave surface to improve viewing by

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reflecting rearwardly directed photons out through the viewing window and also increase the contrast of the discharge element (col. 9 lines 19-26).

Consequently it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a concave surface in the plasma display of Seats et al. since such a modification would improve viewing by reflecting rearwardly directed photons out through the viewing window and also increase the contrast of the discharge element as taught by Schoenbach et al.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Konishi et al. U.S. Patent 5,957,743 disclose a Manufacturing Process for Color Plasma Display Panels. Jang et al. U.S. Patent 6,373,191 disclose a Backplate of Plasma Display Panel. Jang et al. is also a good rejecting. Mizobata U.S. Patent 6,333,600 discloses a Plasma Display Panel with Photoreflexion/Absorption. Akiba U.S. Patent 6,414,435 discloses AC drive type plasma display panel having display electrodes on front and back plates, and image display apparatus using the same.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn Zimmerman whose telephone number is (703) 308-8991. The examiner can normally be reached on M-F.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703) 305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is n/a.



Glenn Zimmerman
September 19, 2002



ASHOK PATEL
PRIMARY EXAMINER